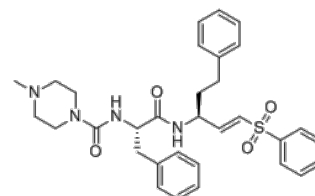


Product Name : K777
Cat. No. : PC-73032
CAS No. : 233277-99-1
Molecular Formula : C₃₂H₃₈N₄O₄S
Molecular Weight : 574.74
Target : Cathepsin
Solubility : 10 mM in DMSO



Biological Activity

K777 (K11777, S-001, SLV213) is a highly potent, irreversible, covalent inhibitor of mammalian **cathepsin L** and other cysteine proteases of clan CA.

K777 was originally developed as an inhibitor of cathepsin S, but later showed promise as an antiparasitic agent.

K777 inhibits *C. parvum* growth in mammalian cell lines in a concentration-dependent manner, rescues mice from a lethal *Cryptosporidium parvum* infection

K777 blocked the entry of pseudovirus forms of SARS-CoV-1 and MERS into Vero E6 or HEK293 cells, likely due to inactivation of cathepsin L (CTSL) on cell surfaces and/or within endosomes.

K777 reduced SARS-CoV-2 viral infectivity in several host cells: Vero E6 (EC50 < 74 nM), HeLa/ACE2 (4 nM), Caco-2 (EC90 = 4.3 μM), and A549/ACE2 (<80 nM).

References

Mellott DM, et al. *ACS Chem Biol.* 2021 Apr 16;16(4):642-650.

J T Palmer, et al. *J Med Chem.* 1995 Aug 18;38(17):3193-6.

Ndao M, et al. *Antimicrob Agents Chemother.* 2013 Dec;57(12):6063-73.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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